# Asheville Redefines Transit

## 2013 ART Survey Results

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#### Introduction

In May of 2012, the Asheville Transit System rolled out a series of new changes to its bus system. Known as Asheville Redefines Transit, or ART, the new implementations are entering their third year. In the spring of 2013 Just Economics, along with members of its Transportation Group, decided to gauge ridership information and feelings about ART and the changes to the bus system. A survey was designed and distributed around town that May by Just Economics and partner organizations.

Later that summer, The City of Asheville Transit department requested to use the same survey for their own independent data collection. Along with members of Asheville's transit committee, the department distributed surveys in November of 2013, both electronically and in paper copy form.

The two organizations, Just Economics and The City of Asheville, each have their own unique interests with the data, but overarching goals are shared:

- Quantify who is riding the bus based on demographic characteristics
- Knowing which routes are best serving riders and which routes most need improvements
- Evaluating the changes in ART service over the past year
- ❖ Identifying the relative importance of potential transit system changes
- ❖ Determining how well ART is serving its diverse people and communities
- Moving forward in continuing to make adjustments to best serve the community

#### Methodology

Just Economics, along with several partners, designed a survey and in May of 2013, passed out copies at the transit station, on the buses, around public housing areas, in downtown Asheville, and at events/meetings where bus riders are known to frequent. 227 unique paper copy surveys were collected, most of which were filled out by survey participants. In several instances when the survey taker was unable to complete the form independently, each question was asked verbally and recorded on behalf of the individual.

The City of Asheville's Transportation Department got involved shortly after Just Economics finished conducting its data collection. Using the same survey, the City of Asheville put a version online via Survey Monkey, accessible from the ART website from November 14 – November 27. 156 unique electronic responses were collected

during this time period. Asheville Transit Committee members also handed out paper copies of the survey at the transit station from November 18 – November 23 and collected an additional 282 unique responses.

665 total surveys were collected between May and November. Using Statistical Package for the Social Sciences (SPSS) data analysis software, the survey data was analyzed and is presented in this document.

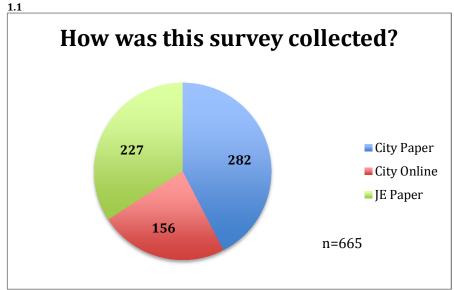
#### **Acknowledgments**

The final product this report reflects the work of many individuals and organizations. A big thank you to Just Economics, especially Vicki Meath, Amy Cantrell, Mark Hebbard and their Transportation Group for their creativity is making this whole process happen. Thanks to members of Voices for Economic Justice, Just Folks, the Asheville Homeless Network, Be Loved House, Children First, the Center for Participatory Change, YES! Youth Empowered Solutions, WNC Party for Socialist Liberation, and the Women's Wellbeing and Development Fund for their help in distributing surveys and partnering with Just Economics during the process and beyond.

Thank you to the City of Asheville Transportation Department and the Transit Commission for their help with survey distribution and their commitment to making ART great. Thanks to Asheville Transit Projects Coordinator Yuri Koslen for overseeing much of the process.

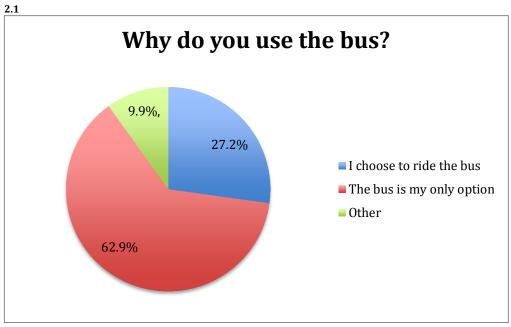
Finally, a big thanks to Dr. Lyndi Hewitt, professor of sociology at the University of North Carolina at Asheville for her mentorship throughout the entire process.

### **Findings & Discussion**



Source: 2013 ART Survey

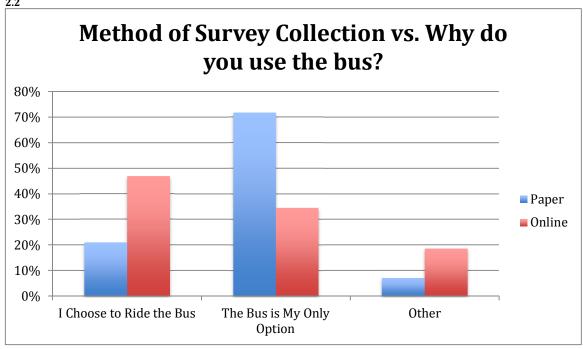
This data was collected using two distinct survey methods collected by two bodies, the City of Asheville and Just Economics of Western North Carolina. The City of Asheville collected 282 surveys via paper copies ("city paper") and 156 online surveys ("city online") while Just Economics of WNC collected 227 surveys via paper copies ("JE paper"). A total of 665 surveys were collected and analyzed (n=665).



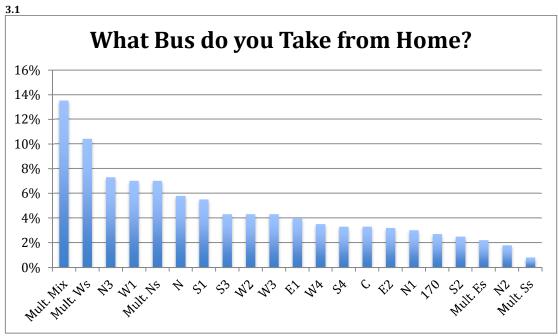
Source: 2013 ART Survey

The question "Why do you use the bus?" was asked in order to know how many riders use the bus out of necessity ("non-elective riders") and how many use the bus based on choice ("elective riders"). The numbers here are similar to the 2008 Rider Survey, which showed that 68% were non-elective riders, 27% were elective riders, and 5% fell into the "other" category.

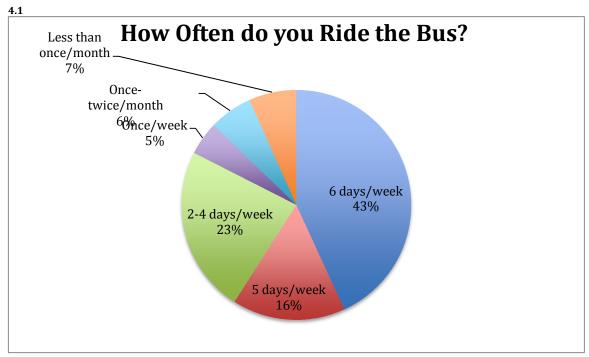




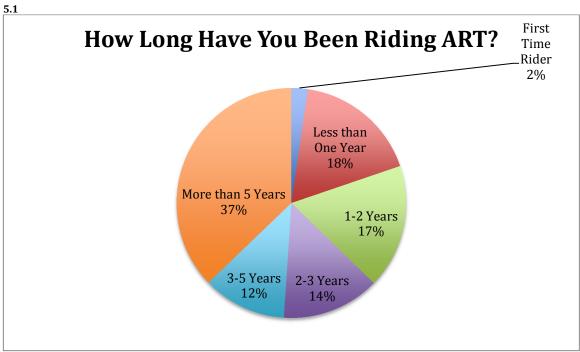
This graph divides the survey respondents into two groups based on the means of survey collection: paper survey or online survey. The chart shows the reasons for riding the bus (choice, necessity, or other) of respondents as a percentage of the whole within their method of survey collection. We notice that those who took the online survey were more likely to report riding the bus by choice (46.8%) versus paper copy respondents at 21%. The paper survey group is twice as likely than the online group to report that they ride the bus because it is their only option. Please refer to the limitations section for more discussion on the implications of different survey collection methods.



The question was left open-ended. Many riders reported taking many buses from home, which are indicated by the "mult" (multiple) categories.

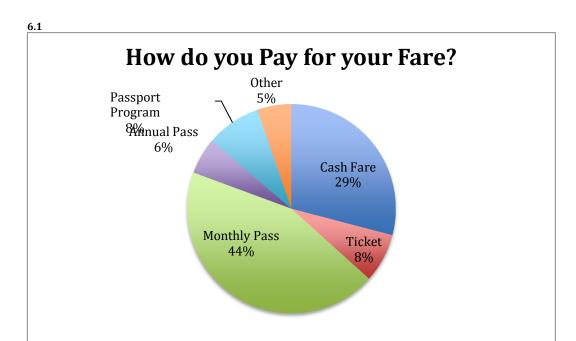


Results indicate that most respondents ride the bus fairly frequently. The general trends are similar to the 2008 City Survey, though the current survey has a slightly higher number of riders who ride the bus less frequently.

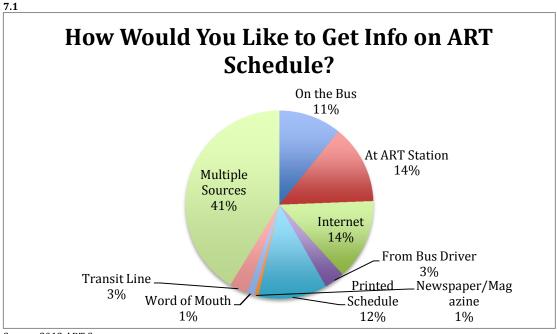


Source: 2013 ART Survey

Results indicate that many riders surveyed have been riding the bus for many years. It appears there is greater longevity in ridership now than there was based on the 2008 City Survey.

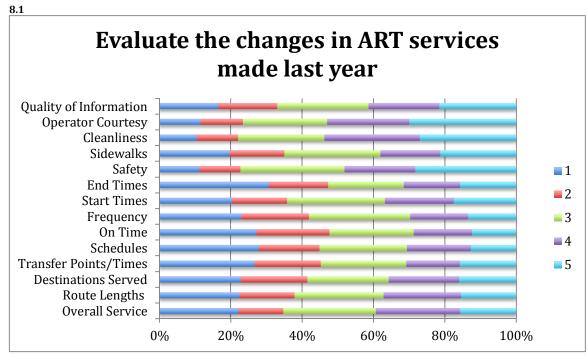


The most common form of bus payment is the monthly pass at 44% (down from 51% in 2008) and cash fare at 29% (up from 27% in 2008). Notably, the Passport Program has increased to 8% (up from 3% in 2008). The Passport Program is a service offered to major employers in which the employer prepays, at a reduced rate, for bus passes for their employees/students. Participants include The City of Asheville, Buncombe County, The Grove Park Inn and UNC Asheville.

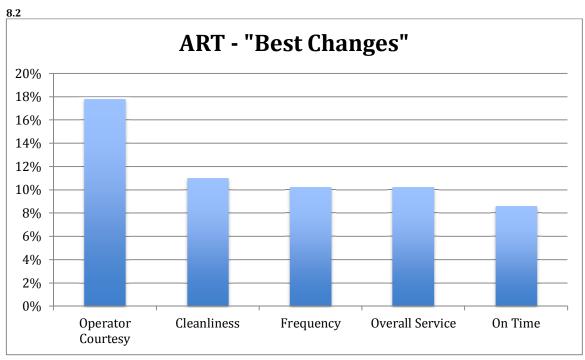


Source: 2013 ART Survey

When asked, "How would you like to get information about ART?" the largest share (41%) of respondents answered that they would like access from multiple sources (indicated by checking two or more of the categories listed). At 14%, equal numbers responded that they would like to get schedule information from the Internet or from the ART Station. At 12% and 11%, printed schedule and on the bus, respectively, were the next highest categories. Small percentages show low interest in getting information exclusively from the transit line, bus driver, word of mouth, and newspaper/magazine.

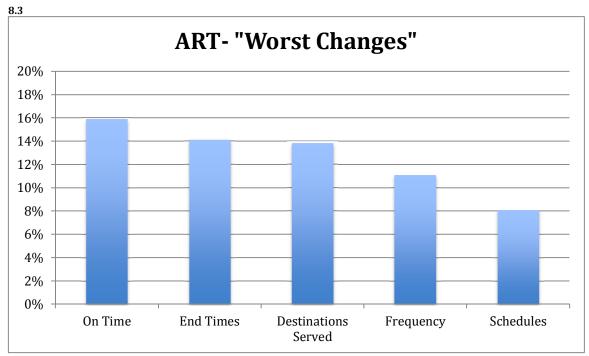


Where 1 = Worse, 5 = Greatly Improved

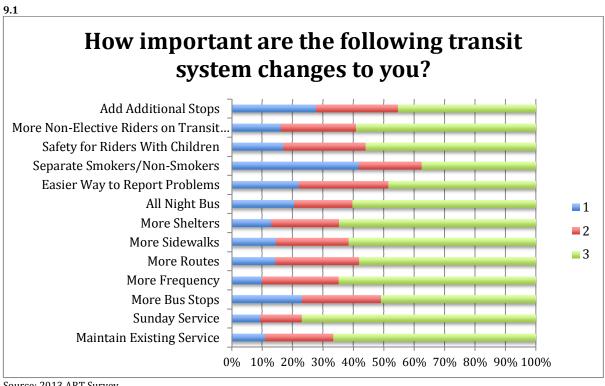


Source: 2013 ART Survey

Given 14 choices and asked to choose one, these were cited as the top five best bus system changes.

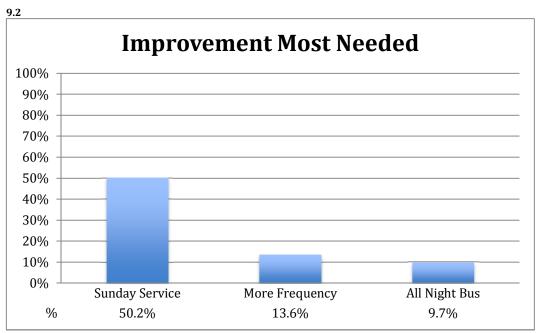


Given the same 14 choices and asked to choose one, these were cited as the top five worst bus system changes.

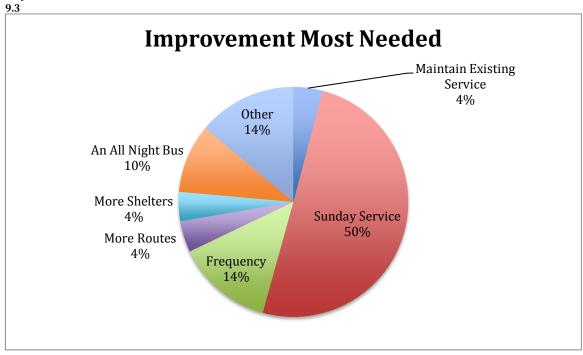


Source: 2013 ART Survey

Where 1 = Not Important, 2 = Somewhat Important, 3 = Very Important.

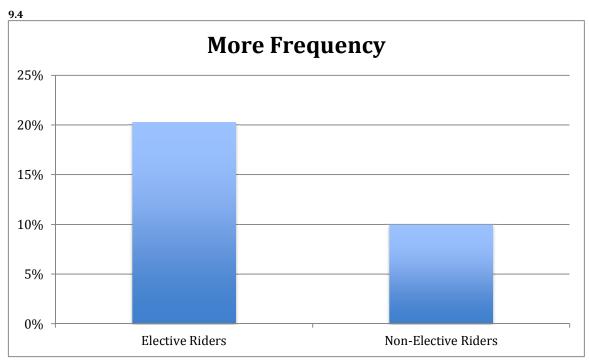


Given 13 choices and asked to choose one bus system improvement that is most needed, these were the top three responses. The other 10 choices each received less than a 5% share of total responses. Like the 2008 Rider Survey, over 50% of riders consider Sunday service the most important improvement needed.

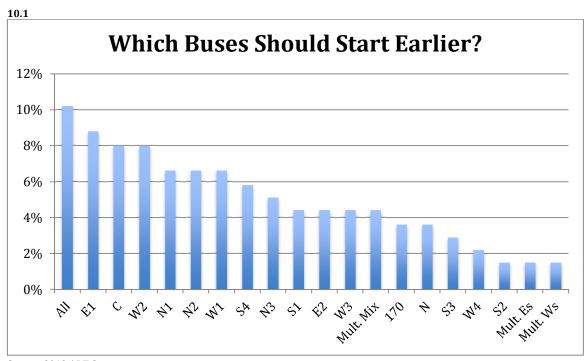


Source: 2013 ART Survey

Here is an alternative representation of the one bus system improvement that is most needed. Here "other" captures the seven categories that received less than a 3% share of total responses (more bus stops, more sidewalks, easier way to report problems, more enforcement and separation of smokers/nonsmokers, safety for riders traveling with children, more riders who HAVE to ride the bus on the Transit Commission, and create additional stops). Like the 2008 Rider Survey, slightly over 50% of riders consider Sunday service the most important improvement needed.



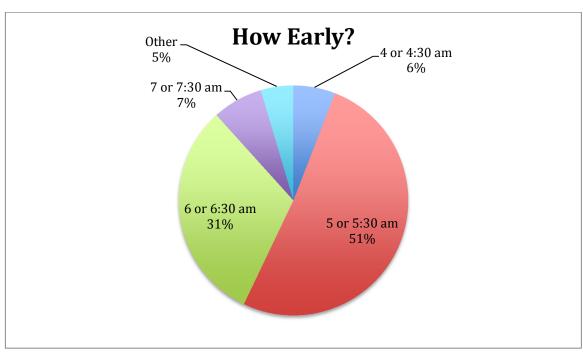
Elective riders were significantly more likely to indicate "more frequency" as the improvement most needed when compared to non-elective riders.



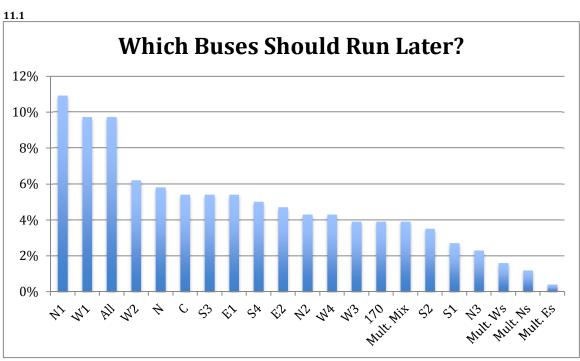
Source: 2013 ART Survey

Respondents were asked for an open-ended response.

10.2

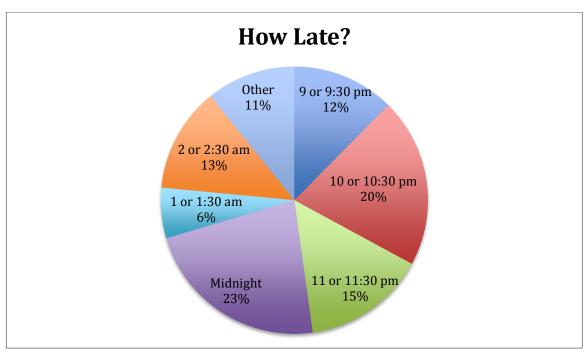


The majority (51%) of respondents would like the buses to begin running at 5:00 or 5:30am, followed by 31% who would like the buses to begin running at 6:00 or 6:30am. 18% of respondents reported a desire for the buses to begin either before 5:00am or after 6:30am.

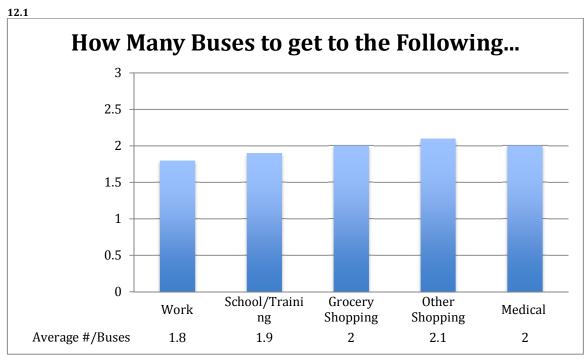


Source: 2013 ART Survey

When asked for an open-ended response, the greatest share of respondents answered that they would like the N1 bus to run later.

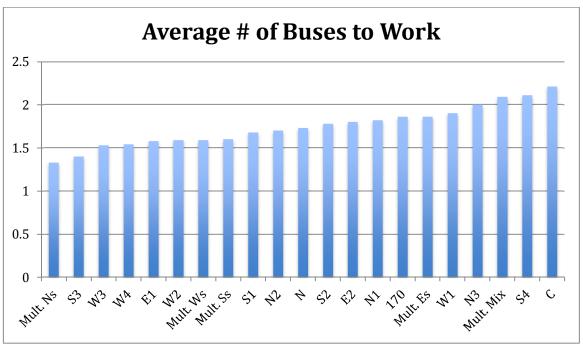


Respondents who answered that they would like the buses to run later were spread out in terms of "how late," though the majority (59%) responded that they would like the buses to run until at least between 10:00pm and midnight.

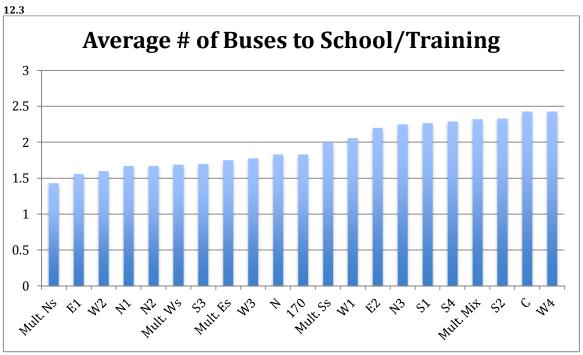


Source: 2013 ART Survey

These are the average number of buses/transfers riders of ART as a whole take to get to five different destinations.

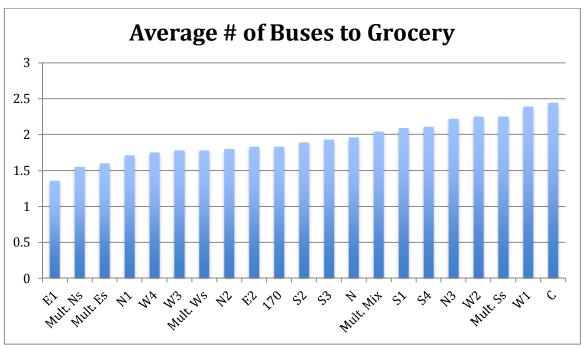


In ascending order, these are the average number of buses/transfers riders of particular routes take to get to work.

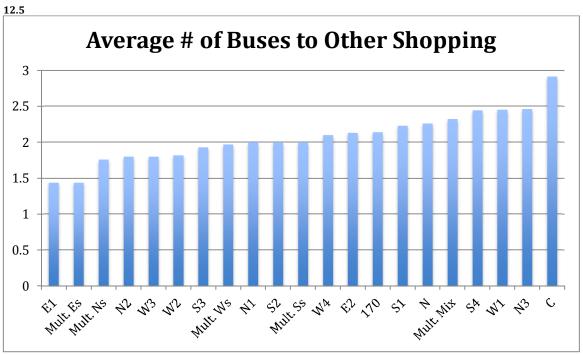


Source: 2013 ART Survey

In ascending order, these are the average number of buses/transfers riders of particular routes take to get to school or an equivalent job-training program.

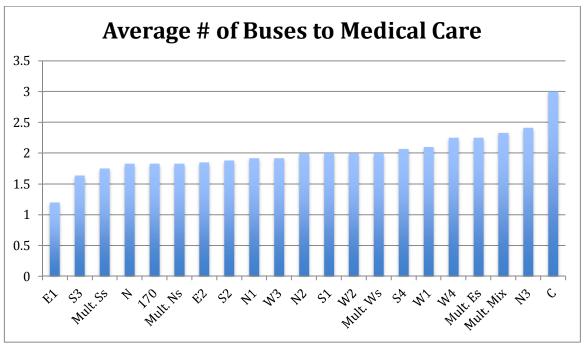


In ascending order, these are the average number of buses/transfers riders of particular routes take to get to a grocery store.

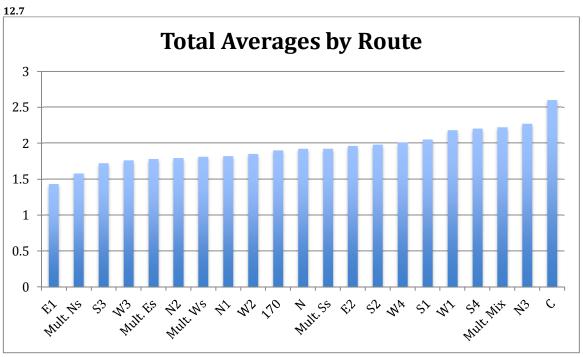


Source: 2013 ART Survey

In ascending order, these are the average number of buses/transfers riders of particular routes take to get to other shopping, which here is understood as shopping for goods other than groceries.



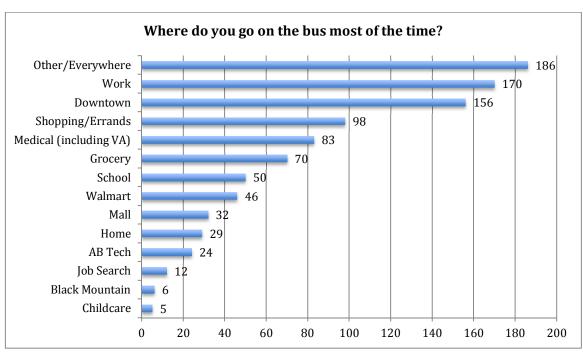
In ascending order, these are the average number of buses/transfers riders of particular routes take to get to medical care.



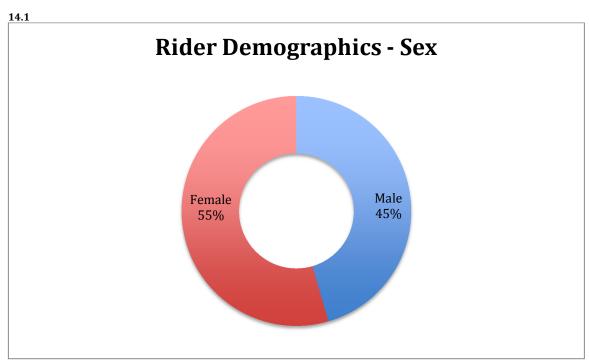
Source: 2013 ART Survey

In terms of efficiency, it appears that the E1 route requires the fewest number of transfers to get riders to their destinations (work, school/training, grocery, other shopping, medical care). The average rider of the E1 uses 1.43 buses to get to those locations. The C route seems to be the least efficient, requiring the most transfers to get riders to their destinations. The average rider of the C bus uses 2.6 buses to get to those locations.

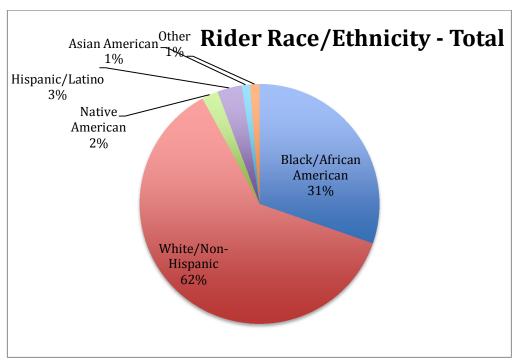
13.1



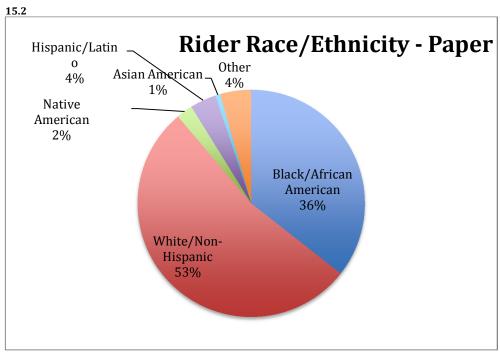
Respondents were asked this open-ended question with their top three answers recorded.



Source: 2013 ART Survey
The rider breakdown based on sex is close to being in line with 2010 Census data, showing there is a slightly higher percent of Asheville residents are women (52.8%).

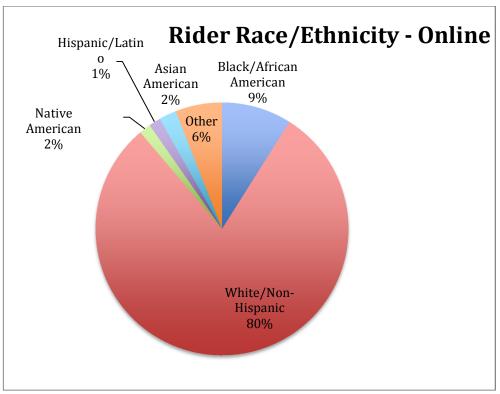


The race/ethnicity of respondents surveyed is shown here in totality. Based on differences in method of survey collection, this data is further divided based on paper surveys responses and online survey responses.

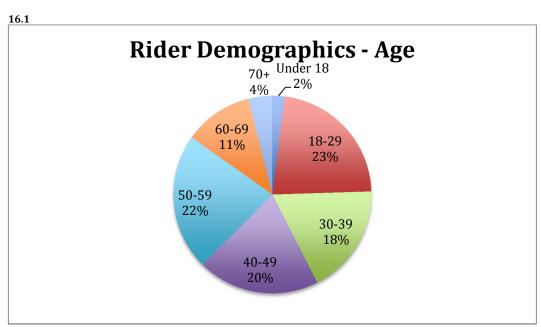


Source: 2013 ART Survey

The race/ethnicity of survey respondents from paper copy surveys most closely mirrors results seen in the 2008 Survey. In 2013 we see higer rates of White/non-Hispanic riders (up 4%) and a lower rate of Black/African American riders (down 4%). The breakdown remains different than averages found in other US transit systems in that ART has a larger share of White/non-Hispanic riders. 15.3

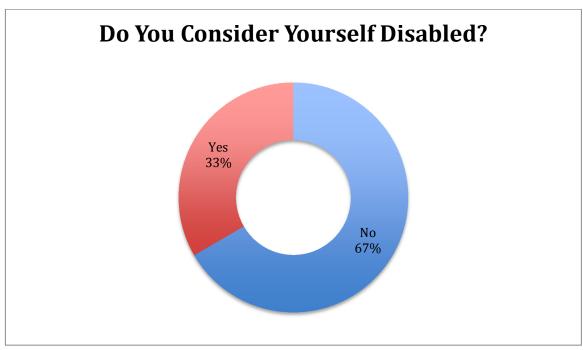


The online survey data has a very different race/ethnicity breakdown. A much larger percentage of online respondents identify as White/non-Hispanic or other, while a much smaller percentage identify as Black/African American, Hispanic/Latino, Asian American, or Native American. These results differ substantially from paper surveys done in 2013 as well as the 2008 City Survey.

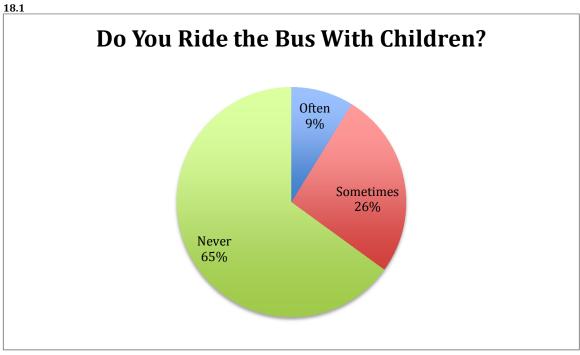


Source: 2013 ART Survey

The average age of a rider is 42.8 years old. There is great diversity among the age of riders, with most riders between the ages of 18-69.

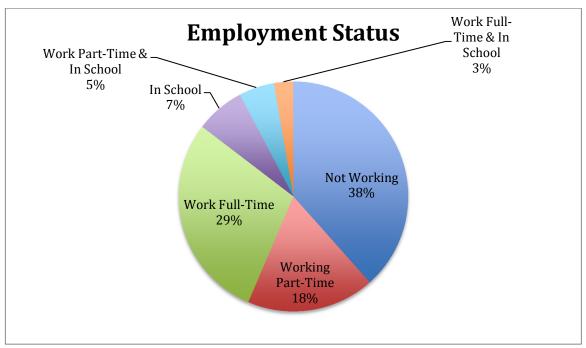


This question allowed for respondents to self identify. 1 out of 3 riders consider themselves disabled.

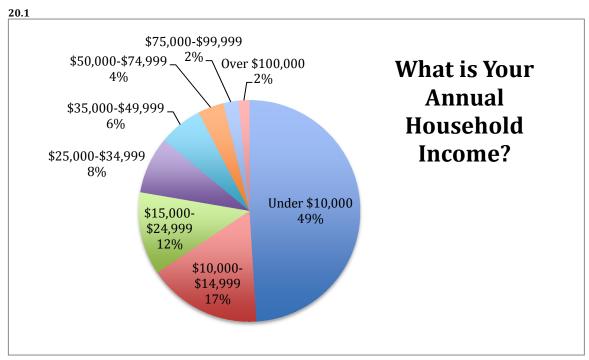


Source: 2013 ART Survey

Although the majority of riders are not riding the bus with children, more than 1 out of 3 riders ride with children sometimes or often.



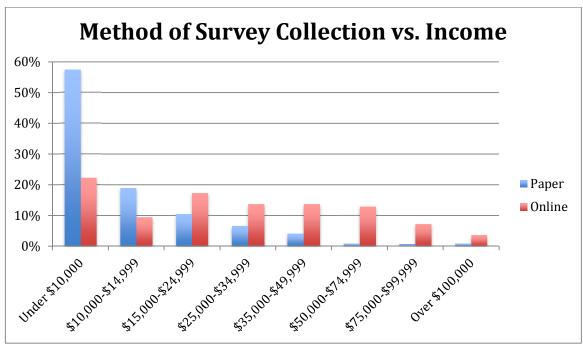
While 38% reported not working, 55% were working at least some.



Source: 2013 ART Survey

This question gives us an important understanding of ART – the majority of riders are low-income. These results are generally not starkly different than those found in the 2008 survey, which showed that 48% of riders reported an annual household income of under \$10,000 and 68% were under \$15,000. The results that differ most greatly are the number of riders reporting over \$50,000 in annual household income, which rose from 3% in 2008 to 8% in 2013.

20.2



This graph divides the survey respondents into two groups based on the means of survey collection: paper survey or online survey. The chart shows the annual household income of respondents as a percentage of the whole within their method of collection category. For example, among the paper survey respondents, 57.4% reported an annual household income under \$10,000 while only 22.3% of online survey respondents reported an annual household income under \$10,000. This shows that those who took the survey online have higher average incomes than those who completed a paper copy of the survey. Please refer to the limitations section for more discussion about the implications of different survey collection methods.

#### Limitations

The information presented was collected in three distinct ways: paper copies by Just Economics, paper copies by the city, and Web survey by the city. This being the case, there may be differences among the data sets. Upon analysis, it appears that both sets of paper survey's collected appeared very similar to one another. On the other hand, the online survey stood apart in some ways. As with most online surveys, users are self-selecting, meaning those with the greatest interest in the topic choose to take the survey. Furthermore, taking the online survey implies computer and internet access. This is likely why a greater proportion of the online survey-takers reported higher household incomes and less dependence on the bus. Where there seemed to be significant discrepancies among the data sets, attention has been called.

There were slight discrepancies between the paper survey and the electronic version in the question "how late should it [bus] run?" The paper survey left it an open-ended answer while the electronic version listed times and had the respondent choose one.

When asked, "What bus do you take from home?" many responses included more than one bus or were vague. Had the question been reworded to "What bus do you take from home *most often,*" or there had been listed routes with a "pick one" option, there could be more data to interpret.

When recording answers for the question "How would you like to get information about ART?" respondents that checked more than one box were categorized as "multiple sources." This led to fewer specific answers, limiting the ability to interpret results.

#### **Conclusion**

The survey is designed to garner a greater understanding of the makeup of ART's bus riders and their wants and needs. There were many points to compare and contrast between the 2008 Rider Survey and the 2013 ART Survey. Demographics are changing – for example, there is greater longevity among riders. Some of the desired changes remain the same, such as the request for Sunday bus service. Just Economics, The City of Asheville, and all other interested parties can now look at these results and continue to move forward, working on making transportation in Asheville work for all.